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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,600	07/09/2003	Atsushi Onoe	4105-18	8289
23117	7590	11/20/2006	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			HALEY, JOSEPH R	
			ART UNIT	PAPER NUMBER
			2627	
DATE MAILED: 11/20/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/615,600

Applicant(s)

ONOE ET AL.

Examiner

Joseph Haley

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-4 and 7-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-4 and 7-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 3 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakai et al. (US 5329122).

In regard to claim 3, Sakai et al. teaches a recording/reproducing head for recording information in a dielectric material of a dielectric recording medium or reproducing information recorded in the dielectric material of the dielectric recording medium (fig.1 element 3), the recording/reproducing head comprising: a supporting member of a longitudinal shape which is long in one direction (fig. 25 element 2100); a projection portion disposed on one end in the one direction of said supporting member (2107); a first electrode, which is penetrated from the tip portion of said projection portion and disposed in the central portion of said projection portion, for applying an electric field to the dielectric material (2106); an electric conductor portion, which is disposed on a surface of said supporting member opposite to the dielectric material, for taking an electric connection with said first electrode (2130); and a second electrode disposed on a surface of said supporting member facing to the dielectric material (2131).

In regard to claim 7, Sakai et al. teaches a recording/reproducing head for recording information in a dielectric material of a dielectric recording medium or reproducing information recorded in the dielectric material of the dielectric recording medium (fig.1 element 3), the recording/reproducing head comprising: a supporting member of a longitudinal shape which is long in one direction (fig. 25 element 2100); a projection portion disposed on one end in the one direction of said supporting member (2107); a first electrode, which is penetrated from the tip portion of said projection portion and disposed in the central portion of said projection portion, for applying an electric field to the dielectric material (2106); a substrate, which is disposed so as to surround said first electrode, for fixing the other end of said supporting member in the one direction (element 2100); an electric conductor portion, which is disposed on a surface of said supporting member opposite to the dielectric material, for taking an electric connection with said first electrode (2130); and a second electrode disposed on the surface of said supporting member facing to the dielectric material so as to surround said first electrode (2131).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai et al.

In regard to claims 4 and 8, Sakai et al. teaches all the elements of these claims except scanning nonlinear dielectric microscopy method.

At the time of invention it would have been obvious to one of ordinary skill in the art to use the head of Sakai et al. with a scanning nonlinear dielectric microscopy method. The use of the present invention with the scanning nonlinear dielectric microscopy method is merely a statement of intended use; therefore, it would have been obvious to use the head of Sakai et al with the scanning nonlinear dielectric microscopy method because it would allow the reading and writing of information on the atomic scale (see MPEP 2144.07).

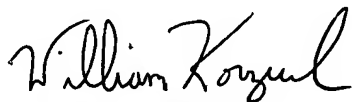
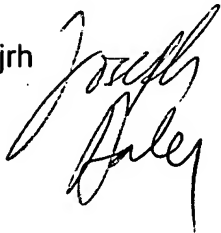
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Haley whose telephone number is 571-272-0574. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jrh



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